

NATIONAL NEWS BRIEF

With gifts, donations, bazaars and panels

Jordan marks Social Works Day

AMMAN, April 5 (JT) — Jordan today observed Social Works Day with gifts to the deprived, donations to charitable societies, bazaars and panel discussions.

Her Highness Princess Basma, the president of the Queen Alia Jordan Welfare Fund, and His Highness Prince Ra'd Ibn Zaid, the honorary president of the Friends of the Blind Society (FBS), were especially active.

In the morning, Princess Basma visited a kindergarten at Baqa'a refugee camp and announced a JD 1,000 donation to help the school carry out its various programmes.

Later in the day, Princess Basma handed a cheque for JD 6,000 donated by the Federation of Iraqi Women to the Mental Health Association (MHA) in Wadi Seer.

During her visit to the association's headquarters, Princess Basma was briefed on the MHA's centres which cater for mentally retarded children in Karak, Salt, Irbid and Zarqa.

The princess also announced that the Queen Alia Fund would offer its financial support to any worthy project undertaken by the country's charitable societies.

Prince Ra'd presented a much-needed gift to Al Nour Institute for the Blind: a Braille printing press to help the institute produce brochures and booklets for the blind.

During a visit to the institute today, the prince said FBS would continue to offer the blind all possible assistance in their quest to acquire education and skills.

Contacts are under way with Alia, the Royal Jordanian Airline, and the Ministry of Finance and Customs to exempt equipment needed by the blind from freight and customs duty, Prince Ra'd said.

He added that contacts are also being made with the University of Jordan to exempt the five blind students currently studying at its various faculties from paying tuition fees.

also will be established in Wadi Salt during the summer, he said.

In Tafilah, the town's Young Women's Society held a panel discussion at the Qasr Preparatory School for Girls in which the directors of social development and health in the district spoke about the causes of disabilities and social development and health care.

The Tafilah celebration of Social Work Day includes the convening of panel discussions

and the handing over of gifts to the residents of handicapped institutions and government hospital.

The programme also includes an open meeting for women in and the rendering of several public services.

In Mafrqa, the district celebrated Social Work Day with visits to rehabilitation and orphanages where gifts were distributed.

A panel discussion was held at the Deir Yusuf charitable society in Irbid governorate today. The symposium dealt with the role of women in developing society.

King stresses social work for Arab World

AMMAN, April 5 (JT) — His Majesty King Hussein today stressed the importance in the Arab World of social work, which helps "set free the capabilities of citizens and encourages them to share in building up their society."

King Hussein was addressing members of the executive board of the Arab Social Affairs ministers' council during an audience at the royal court this afternoon.

Members of the executive board, which includes social affairs ministers in five Arab countries, briefed the King on subjects on the agenda of their two-day meeting here. The audience was attended by the minister of social development, Mrs. Iram Al Mufit, and the Arab League assistant secretary general, Mr. As'ad Al As'ad.

The current executive board of the Arab Social Affairs Ministers' Council consists of the social affairs ministers of Jordan, the United Arab Emirates, Tunisia, the Yemeni Arab Republic, and the People's Democratic Republic of Yemen.

The executive board, which ended its meeting tonight, approved a programme for following up the implementation of current social work strategy in the Arab World.

It also agreed on the draft agenda for the forthcoming meeting of the Arab Social Affairs Ministers' Council due to be held in Tunis late this year.

The board also requested the council's technical secretariat to prepare budgets for three proposed Arab centres for research, training in social and rural development and training care for the handicapped.

The board recommended the appropriation of specific amounts of the funds allocated by the 11th Arab summit conference for the Arab Development Decade to be spent on social development projects approved by the Arab Social Affairs Ministers' Council.

The board approved a plan to provide technical assistance to member states through the supply of scholarships and the dispatch of experts to those member states which lack the technical cadres to facilitate the implementation of the strategy of social work.

Earlier today, the prime minister, Mr. Mudar Badran, conferred at his office with the social affairs ministers of Tunis, North Yemen and the United Arab Emirates in the presence of Mr. As'ad and Mrs. Mufit.

The delegates today toured philanthropic and social centres in the country.

Accompanied by Mrs. Mufit, the delegates called at the Queen Alia Centre for the Hearing Impaired and toured an exhibition being held there on the occasion of Social Work Day.

The delegates also visited a centre for the rehabilitation of delinquents at Yajouz and called the Princess Rahmah Community Centre in Allan.



Her Highness Princess Basma distributing presents to children at the Baqa'a refugee camp kindergarten Sunday.

There are 89 blind people studying at Al Nour Institute, which was established in 1969. A total of 17 teachers, 10 of whom are themselves blind, teach at the institute, the only government institution of its type in the country.

About 100 children from orphanages in Amman visited children's centres today as part of Social Work Day.

The youngsters spent the day at the centres run by the Friends of Children. They did arts and crafts work, saw a puppet show and a film, and enjoyed a drama session. In Salt, the governor of Balqa, Mr. Mohammad Al Khatib, today opened a bazaar organised by the social development directorate in cooperation with the charitable societies in the governorate.

At the two-day bazaar, samples of the products of the charitable societies in the governorate are exhibited.

The governor urged the participants in the bazaar to work hard to manufacture children toys and clothes.

He said work is underway now to open children clubs in the governorate schools during the summer vacation in cooperation with the education and social development directorates and the Haya Arts Centre. A playground

AMMAN STOCK EXCHANGE REPORT

Table with columns: Name of Company, Par Value, Number Traded, High, Low, Closing Price. Lists various companies like Islamic Bank, Jordan-Kuwait Bank, etc.

FOR RENT: A third floor flat in modern building consists of three bedrooms, two living rooms, dining room, two baths, kitchen, and three balconies, independent central heating, with telephone and lift.

FOR RENT: Furnished apartments: A. Two studios; one bedroom, kitchen and bath. B. One bedroom, living room, kitchen and bath. Centrally heated and telephone. Location: Jabal Amman, near Firas Bookshop, Third Circle.

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NATIONAL NEWS BRIEF

AMMAN, April 5 (Petra) — The cabinet today formed Jordanian delegation to the meetings of the coordination bureau of the no aligned movement which will be held in Algiers between April 1 and 18. The four-member delegation will be led by Jordanian permanent representative at the United Nations, Dr. Haze Nuseibah. Also at its regular session today the cabinet formed a delegation to go to Baghdad on April 9 for talks aimed at boosting Jordanian-Iraqi industrial and trade cooperation.

The n.i. member delegation will be led by the minister of industry and trade, Mr. Walid Asfour. The visit and talks are at the invitation of the Iraqi minister of trade and industry.

AMMAN, April 5 (Petra) — The National Consultative Council (NCC) will hold a meeting on April 13 to debate the final report of an NCC committee entrusted with reviewing the national five year development plan. The draft committee itself will hold a meeting tomorrow to continue work on its report.

AMMAN, April 5 (Petra) — A spokesman for the Public Security Directorate said today that 36 incidents occurred in Jordan in the past 24 hours. Among these, he said, there were seven road accidents in which one child was killed and seven other people injured, most of them seriously.

AMMAN, April 5 (Petra) — Amman Municipality today distributed 6,500 books dealing with scientific, literary, political and economic subjects to 40 libraries of government schools, clubs and cultural centres in Amman. Upon handing over the gifts to the representatives of the libraries, Mayor Isam Ajjouni said that the gift was in observance of Jordan's National Book Week. The municipality has so far presented some 50,000 books to various libraries in Amman, Mr. Ajjouni said.

AMMAN, April 5 (Petra) — The director general of the Royal Scientific Society (RSS), Dr. Albert Butros, left for Tunis today to take part in the week-long meetings of an advisory committee formed by the Arab League Educational, Scientific and Cultural Organisation (ALESCO) which start tomorrow. Dr. Butros said the ten specialists in the committee will review, among other things, subjects connected with integrated technological and scientific plans in the Arab World; supporting the work of research centres and the effects of pollution on the environment. Dr. Butros said he would also meet with the ALESCO director general to explore the possibility of carrying out joint ALESCO-RSS projects and holding seminars on scientific subjects.

AMMAN, April 5 (Petra) — A visiting Qatari education delegation called at the Ministry of Education today and conferred with its secretary general, Mr. Thinni Rafat, on ways of promoting educational and cultural cooperation between Jordan and Qatar. The two sides also discussed the subject of seconding Jordanian teachers to work for the Qatari government. At the meeting, Mr. Rafat explained to the delegation the ministry's plans for upgrading academic and vocational education at its schools.

AJLOUN, April 5 (Petra) — The Ministry of Municipal and Rural Affairs and the Environment has endorsed a JD 121,000 budget of 'Ibbin and 'Jbain villages in the Ajloun district. The opening of a road linking the two villages with Souf and other development projects in the district will be financed from this budget.

WHAT'S GOING ON

- Exhibitions: Under the patronage of Mr. Michael Hamarneh, the director of tourism, the Jordanian Artists' Association presents an exhibition of flower-arrangements by Alema Abdallat. The opening ceremony will take place at the association's hall, at 5 p.m.
The Alia Art Gallery, in cooperation with the Mathaf Gallery in London, presents an exhibition of works by artists of the 18th-19th century Orientalist movement.
The Department of Antiquities presents an exhibition on "The works of the Spanish Archaeological Mission in Jordan", at the Holiday Inn hotel.
The Department of Libraries, Documentation and National Archives, in cooperation with Jordanian educational institutions, continues its campaign to promote awareness of the importance of books through book exhibitions all over the country. National Book Week includes the second exhibition of children's books and art work at the Zarqa girls' high school of commerce in Zarqa.

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NATIONAL

Works of Spanish mission combine beauty with utility

They are small things, but they do mean a lot. That is how His Highness Prince Zaid expressed his appreciation for the work of foreign archaeological missions in the country. Prince Zaid, delegating for His Royal Highness Crown Prince Hassan, was speaking at the opening Saturday night of an exhibition of the work of the Spanish Archaeological Mission in Jordan. After he

finished his remarks (introduced by Spanish Ambassador Don Luis de Pedrosa) and one got a chance to view the exhibition itself, it became clear that these things, though they do mean a lot, are not so small. Filling two-thirds of the ballroom of the Amman Holiday Inn is an impressive — and, at times, strikingly beautiful — array of plans, photographs and drawings. It is, in the words of the mission's director, Prof.

Martin Almagro, a "graphic representation" of the work the Spaniards have done in Jordan over the last 11 years: but presents only a very small part of the campaign of excavation, restoration, photography and planning that has been, and continues to be, carried out.

The mission started its work here with the cleaning and restoration of the colourful frescoes decorating the interior of Qusayr Amra, the early eighth-century Umayyad desert hunting lodge and bathhouse. After the removal of the layers of soot and grease that had built up over the centuries, the building's walls were revealed to bear exquisitely detailed depictions of the life of early Islamic times, as well as what appear to be symbolic representations of the power of the newborn Islamic empire. In one domed bath room is a unique representation of the celestial sphere with the zodiac.

Considering their importance, the restoration work and excavations at Amra seem to be underrepresented at the current exhibition, with only four exhibits devoted to the site (including a floor plan). But also on display are copies of the magnificent illustrated volume, available in four languages, which the mission has published as a record of its work there.

Next in time, though perhaps not in importance, to the work at Qusayr Amra was the mission's excavation and restoration project at the Amman Citadel. Here there is another magnificent Umayyad monument, the "Southern Palace".

But the team's work on the Citadel, in addition to confirming the date of origin of the building, determined that it was in fact a *dhwan* or reception hall leading into the residential palace to the north.

The Citadel project has provided the Spanish mission with some of the finest examples of another aspect of its work in Jordan: the production of highly detailed plans, maps and elevations by the sophisticated photogrammetric process. This process involves the use of two cameras at a set distance from each other to record the same scene. By the juxtaposition of the two resulting photos, a drawing is made whose precision and detail is comparable to one made by the more traditional line-and-measuring-tape process.

One view in the exhibition are photogrammetric drawings (elevations and sections) of both the exterior and the highly decorated interior of the "Southern Palace", the northern residential area and other parts of the Umayyad Citadel complex.

The use of the photogrammetric system to produce larger-scale maps was made possible with the assistance of the Spanish air force, and one such map — of the area of downtown Amman surrounding the Citadel — is startling in the amount of detail it reveals.

The exhibition contains a variety of other plans, drawings and photographs of historical sites; but perhaps the most fascinating — and surely the most beautiful — exhibits are the products of the Spanish mission's aerial photo survey.

Aerial photography, whose use in archaeology has become increasingly widespread in recent years, can reveal the broad outlines of a site and often bring out details much more easily than work on the ground. But aside from such practical advantages, some of the results of the photo survey are remarkable simply for their visual qualities. The scene of Khirbat Medineh (excavated by Father Emilio Olavarrri of the Spanish Mission) is one example — the texture and contours of the surrounding wadi rival the work that could come from the best abstract artist's palette. And the photo of an unnamed "Site in Wadi Mujib" haunts one with its mysterious lines and forms. What lies underneath that stony surface?

On some of the photos, labelled as "Aerometric", can be seen a small cross marking the axis of the camera's lens. These photos were produced by a specially built camera, as Prof. Almagro's son Dr. Antonio Almagro explained, whose accuracy enables them to be used in the production of site plans. Such plans have been made available to the Jordanian government and to other foreign missions — the French restoration project at Araq Al Amir, the American dig at Lejjun, the British excavations at Buseirah, and other projects at Petra and the Karak and Shobak castles.

Asked about the Spanish Archaeological Mission's plans for future work in Jordan, Prof. Almagro said the mission intends to continue the excavation at the Citadel, hoping to find the continuation of the southern exterior wall of the Umayyad complex (already visible in an aerial photo).

The team will return to Qusayr Amra to attend to some unfinished business there: in specific, Prof. Almagro mentioned the small square of fresco that had been left uncleaned to show what the walls looked like before the restoration. This square has now served its purpose, he said, and the cleaning will be completed.

In Petra, there is further work to be done in the cleaning of frescoes on the interior of some of the tombs in Wadi Syagha and Beida. This work has already started, the professor noted.

All in all, the Spanish Archaeological Mission has made and continues to make a distinguished contribution to the exploration of the history of Jordan, and the results of its work now to be seen at the Holiday Inn should not be missed. The exhibition continues until April 12.

— S.R.

For follow-up on Oxford conference Concept Group gathers here



His Royal Highness Crown Prince Hassan poses with participants in the First International Conference on the History and Archaeology of Jordan at Oxford last year.

By Steve Ross
Special to the Jordan Times

AMMAN, April 5 — One year ago, His Royal Highness Crown Prince Hassan closed the First International Conference on the History and Archaeology of Jordan in Oxford, England with these words: "The success of this conference is not only the immediate one of friendly discussion, but more importantly the realisation that so much more could be achieved if only one had immediately available the accumulated knowledge that has been so obvious here during the past week."

Now, some of that accumulated knowledge has come together again, this time in Amman; and more is, indeed, about to be achieved.

Under Crown Prince Hassan's patronage, some 20-odd of the most distinguished participants in the Oxford conference have been called to gather this week in Amman as the Concept Group on Jordanian Archaeology. They have been assigned the task of following up on the achievements and recommendations of last year's conference, and planning for future such gatherings.

Participating in the group are scholars resident in Amman such as Dr. James Sauer, director of the American Centre for Oriental Research, and Mrs. Crystal-M. Bennett, director of the British Institute of History and Archaeology in Amman; as well as international figures from places as far apart as Poland, Saudi Arabia, Italy and the United States. Their presence here marks what is, for Jordan, a relatively rare confluence of leading academicians. And the excitement of the occasion could be felt yesterday evening, at the opening of the Spanish Archaeological Mission in Jordan's exhibition at the Holiday Inn (see accompanying review).

The opening was the second of three activities planned for the group's participants before they get down to work tomorrow. After their arrival on Friday, the archaeologists were taken out to the desert yesterday for a tour of work being done on some of the Desert Castles — including Qasr Kharana, Qasr Al Hallabat, the Azraq castle and Hammam Al Sarah; which left some of them with little extra energy to socialise at the exhibition's opening.

Just as strenuous a programme was put on today for willing participants: a visit to the Jordan Valley sites of Tell Al Mazar and Pella (Tabaqat Fahl), ending with lunch at the latter. Nothing was set for them this evening, giving the exhausted (though field-hardened) archaeologists time to recuperate before meeting again around the conference table tomorrow.

The meetings are scheduled to last only two days, with departure set for Wednesday. The Concept Group is to dine with Minister of Tourism and Antiquities Mar'an Abu Nowar tomorrow evening.

During the five days of last year's conference at Oxford University, nearly 40 research papers were presented and discussed. They covered all aspects of Jordan's history, from the formation of its land masses to the end of the Ottoman Empire; and during the discussions it was clear that it is not only contemporary political and social issues that can provoke controversy.

But aside from actual historical

information which might be required by scholars working in the field of Middle East archaeology and associated disciplines."

The question of such a centre is not on the agenda of this week's Concept Group meeting; but according to one participant, it is almost sure to be brought up under "other business". The centre is very much a "live idea", this participant said, and the first step towards its realisation could be taken with the expansion of the present Department of Antiquities Registration Centre to include a museum.

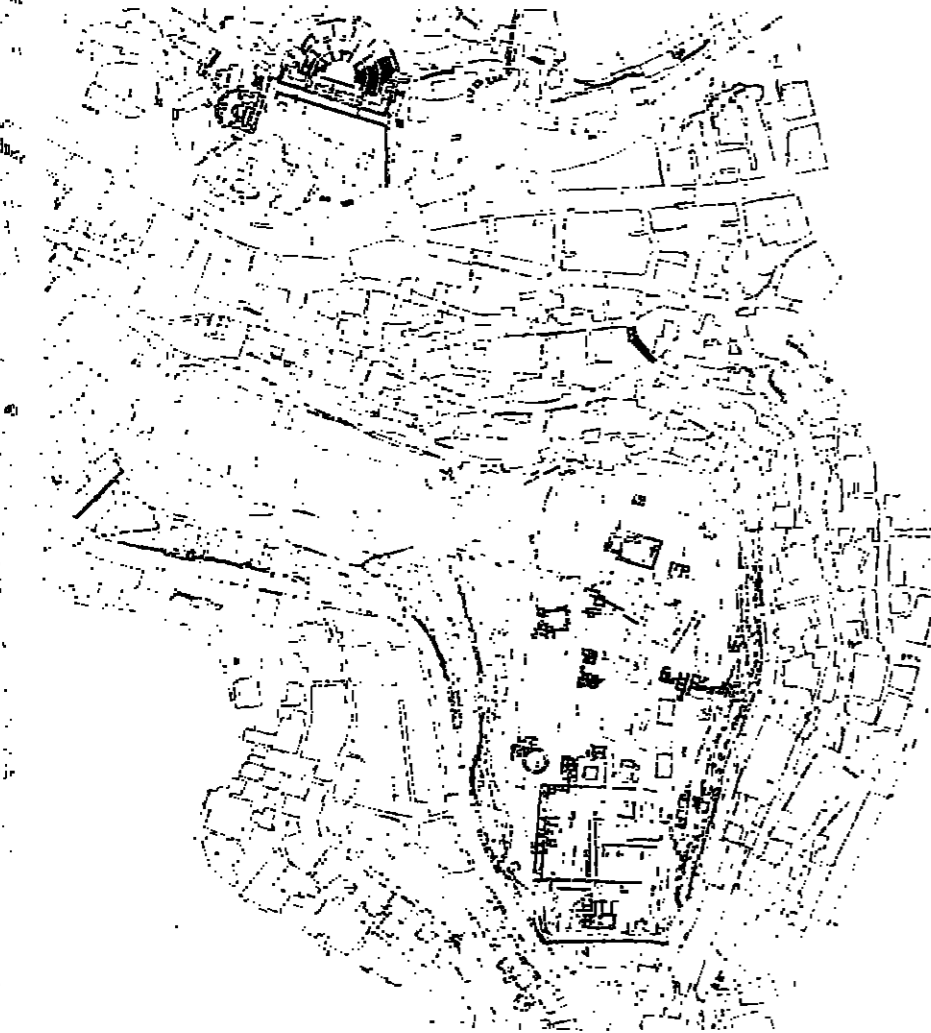
One matter that is on the agenda is a discussion of progress on the publication of a volume of the research paper delivered at Oxford: a volume which will be a compendium of some of the very best work now being done in the disciplines concerned. Publication is a tedious and time-consuming business; but the Department of Antiquities reportedly has the job well in hand.

Also slated for discussion is the location of the next history and archaeology conference. Envis-

aged as biennial affairs, the conferences are to be held "in Amman or elsewhere as appropriate," according to the original Oxford conference statement.

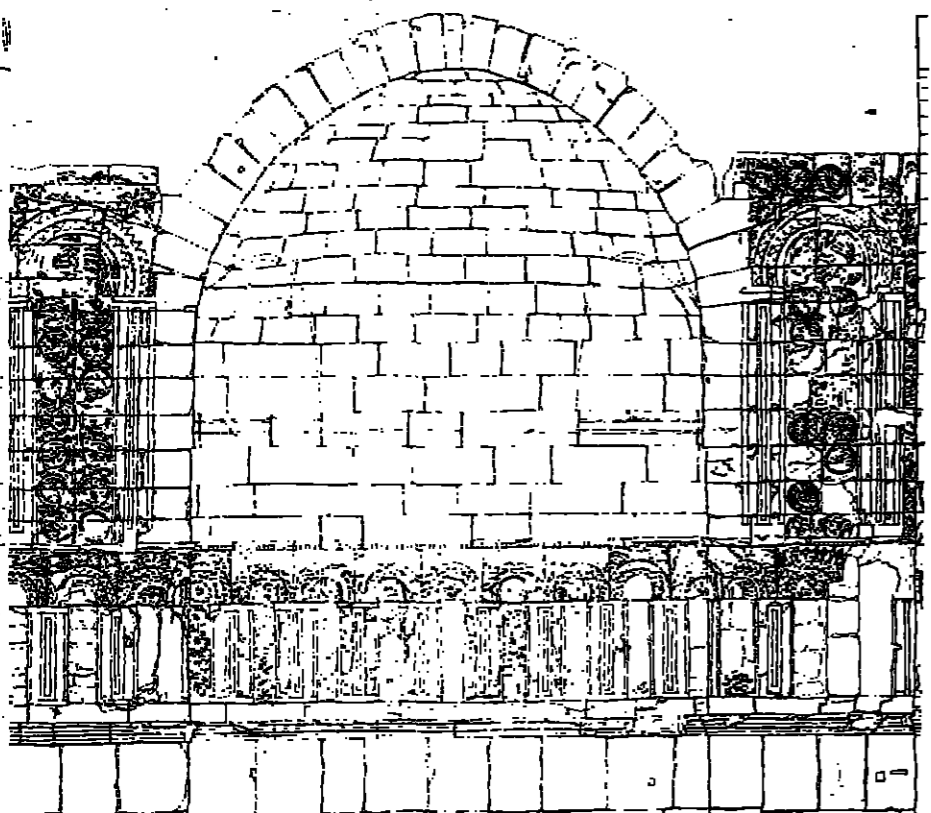
The list of participants in the Concept Group on Jordanian Archaeology includes Prof. Abdul Aziz Al Duri (Jordan), Mr. John Fisiere (Jordan), Dr. Sauer and Mrs. Bennett, Mr. Francois Larche (France), Fr. Jacques Tournay (France), Fr. Michel Piccirillo (Italy), Dr. Lux-Wagner (Germany), Prof. Ernst Krueger (Germany), Prof. Basil Hennessey (Australia), Prof. Paul Naster (Belgium), Prof. A.

Tushingham (Canada), Prof. Siegfried Mittman (Germany), Prof. Handricus Franken (the Netherlands), Prof. J. Ward Perkins (Italy), Prof. M. Gawlikowski (Poland), Dr. Abdul Rahman Al Ansari (Saudi Arabia), Prof. Martin and Dr. Antonio Almagro (Spain), Prof. Peter Parr (U.K.), Prof. Philip King (USA), Prof. Denis Baly (USA), Prof. Walter Rast (USA) and Mr. George Tate (France).



Interior of the Citadel's "Southern Palace" (below).

The photogrammetric system has produced an accurate map of downtown Amman (above) and elevations of the



WORKS OF THE SPANISH ARCHAEOLOGICAL MISSION IN JORDAN



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FEATURES

Astronauts to prove themselves April 10

Space shuttle training: thorough and exacting

WASHINGTON — When astronauts John Young and Robert Crippen rocket into space aboard the space shuttle orbiter "Columbia" they will be going -- and coming back -- in a way never before tried.

Unlike the other American space ships, the shuttle will be the first to land horizontally on an aircraft-type runway instead of splashing down under parachutes in the ocean. And the crew aboard the "Columbia" will not have the benefit of experience with previous unmanned flights of this spaceship.

So much depends on the skill of the crew that the training of the astronauts for this mission has had to be thorough and intensive. Mr. James W. Bilodeau, chief of the crew and training procedures division of the National Aeronautics and Space Administration's (NASA's) Lyndon B. Johnson Space Centre in Houston, points out that the step-by-step approach used in aircraft flight training is not possible in space ventures like the shuttle. On their first try, the two crew members must be able to handle everything flawlessly,

including a difficult re-entry and landing.

"How does one prepare for such a bold commitment to flight?" Mr. Bilodeau asks. Then, replying to his own question, he says, "The only safe way is by extensive system and vehicle testing and by thorough and exacting crew training designed to prepare the astronauts to recognize deviations from normal flight profiles quickly and to take decisive corrective actions in a timely manner."

Young and Crippen have spent hundreds of hours in the classroom, poring over procedure manuals, "flying" shuttle simulators, diving in water-filled tanks to get the feeling of weightlessness in space and piloting aircraft that have been modified to mimic space flight.

They, along with other shuttle crews that include both pilots and scientific specialists, began training for the shuttle mission more than three years ago. The training period has been longer than originally planned because of delays in launching the pioneering reusable spacecraft.

At a recent press conference, Mr. Crippen told reporters, that the extended training time "Has allowed us to prepare for much more catastrophic kind of emergencies."

"We're well prepared to handle just about anything, and the extended time has given us that capability," he said.

At a recent press conference in Houston, Mr. Young gave an example of just how busy their schedule is. One afternoon they did ascent skills. The next day from one to six they were doing entry simulations. Ejection seat review was done from eight to nine on the third day. In the afternoon they were flying the shuttle training airplane out at White Sands (New Mexico) missile range. On the fourth day in the evening... they were set up to depart the Ellington Air Force Base (Houston, Texas) to arrive at Kennedy Space Centre (Florida) in order to participate in the first ascent launch readiness verification test in "Columbia".

Explaining the programme he directs, Mr. Bilodeau says that the training concept is simply to teach

the crew members what they need to know about the booster, the orbiter and the mission they will be required to fly.

"The task essentially consists of training people for the assigned work in the most expedient manner," Mr. Bilodeau says.

"The challenging part is not to overdo training to such a degree that the crews acquire superfluous knowledge at the expense of learning the critical details."

One of the principal training tools for shuttle astronauts is the Shuttle Mission Simulator, or SMS. This is a complex device which, through the use of one huge computer and a host of smaller ones including five that are identical to those aboard "Columbia," virtually duplicates the shuttle's cockpit and its functions. The SMS not only includes the maze of dials, switches and gauges found in the real shuttle, but even has three-dimensional views of space and the earth flashed in the windows.

The "integrated simulations" conducted with the SMS not only thoroughly familiarise the flight crew with their duties and

emergency procedures, but also involve the flight controllers, instructors, simulator operators and mission control support personnel.

Mr. Bilodeau aptly describes the SMS portion of the training as a dress rehearsal for shuttle flights, saying the SMS is the key device for takeoff and landing training.

"This (ascent) mission phase is one of the two in which simulation plays an absolutely essential role in training -- because no unmanned flights will be conducted in the space shuttle programme to demonstrate and validate the system before a manned mission is attempted," Mr. Bilodeau says.

"Astronauts Young and Crippen... will have had to practise for every contingency it is possible to simulate."

The other principal challenge to the simulation approach is in training the astronauts to pilot a glider-like space craft as it re-enters the atmosphere and makes horizontal landing on land. Mr. Bilodeau points out that "The unique piloting tasks and the related training requirements are

all new, the first of a kind."

Another of the important flight training devices is the Shuttle Training Aircraft (STA). It is a standard Gulfstream-Two plane, but it has been modified to simulate the final 9,000 metres of descent as the shuttle returns to earth. The plane is equipped with special equipment to make the approach and landing as similar as possible to the handling of the shuttle.

Astronauts Young and Crippen have logged hour after hour making rapid descents and tricky manoeuvres to bring the Gulfstream into a landing pattern at the same height, speed and position over the runway as will be required in landing the shuttle. Even the pilot's control panel in the Gulfstream has been changed to resemble that of the shuttle.

"The success of the shuttle astronauts in arriving at a safe landing is dependent on how well these simulators (the SMS and STA) duplicate the flight conditions," Mr. Bilodeau says. "It is difficult to imagine a situation in which simulation plays a more critical role in a training programme... understandably more time is devoted to this training than to

any other subject."

Another of the main training devices is a cabin that is similar to the mid-deck living area of the orbiter. Mr. Bilodeau explains that it provides "the routine, albeit essential, training for living in space." This portion of the training emphasises the complexity of performing routine tasks in a weightless state.

"Every aspect of weightless flight is simulated as carefully as possible," Mr. Bilodeau says. "Every piece of loose equipment is always secured... never simply set."

Every piece of trash must be handled with special care to prevent loose particles from clogging an air passage of fanning a fan.

Most of the orbital phase of the initial shuttle flight will be devoted to checking out the craft; such things as opening and closing the bay doors. A test Mr. Bilodeau says is difficult to conduct in earth's gravity, as they were designed to operate in zero gravity.

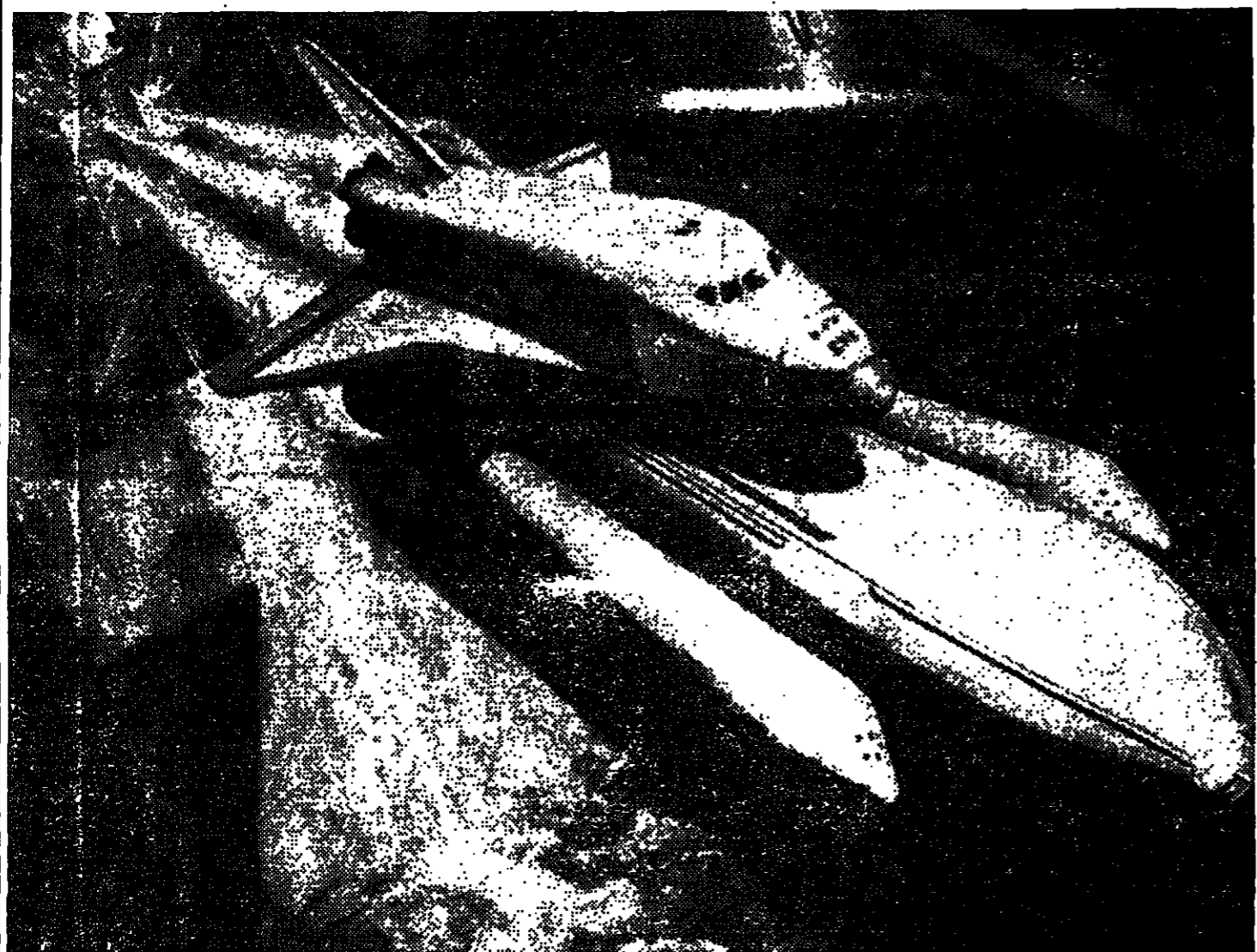
Concerning future flight, Mr. Bilodeau said that much more training time will be devoted to the work that will be performed

during orbital phase, the work for which the shuttle was designed. For future flight the training and types of simulations will depend on the type of mission and the payload -- whether it is a satellite to be placed in orbit or a device to gather data or conduct experiments.

Looking ahead, Mr. Bilodeau sees a streamlined training programme, much different than the one for astronauts Crippen and Young. Several crews will be trained simultaneously.

"Cross-training of each individual to be fully proficient in tasks assigned to others or to deal with improbable contingencies can no longer be accommodated if the United States is to become efficient enough to achieve a launch rate of 60 flights per year," Mr. Bilodeau says. "The challenge of the 1980's is to achieve effectiveness with maximum efficiency. The programme demands that space flights be made as routine as possible and that every usable hour be extracted from each training device to keep the cost of training low."

(USICA feature).



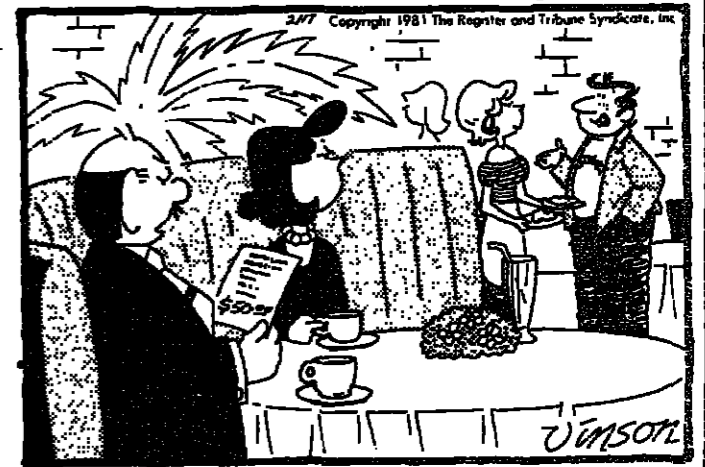
Lift off: an artist's impression of the launch of the space shuttle

JUMBLE THAT SCRAMBLED WORD GAME

Unscramble these four Jumbles, one letter to each square, to form four ordinary words.

Word puzzle grid with words LUFAW, DYLLA, PAMERC, and TELTEK. Includes a cartoon of a nervous pianist and a list of answers from the previous day.

THE BETTER HALF By Vinson



"His doctor says he should be careful about picking up things... girls are OK but checks aren't."

THE Daily Crossword by William Lutwiniak

A crossword puzzle grid with a list of clues for across and down words, and a section for yesterday's puzzle solutions.

GOREN BRIDGE

BY CHARLES H. GOREN 1980 by Chicago Tribune

ASK OMAR

Q.—I think I must be the world's unluckiest bridge player. I know I am not the worst player in my bridge game, but I am by far the biggest loser. I have read stories about your gambling exploits, so I know that you must believe in luck. Tell me what can I do to get Dame Fortune on my side—R. O'Connor, Boston, Mass.

A.—An interesting question. When I first started playing bridge, I felt pretty much the way you do. I used to lose a lot more often than the other players in my game, and I wrote it off to the fact that I was a poor cardholder. Then I noticed that the player who won regularly was the one I considered to be the second-best player in the game (after me, naturally). So I started to keep accurate records and found, to my surprise, that I was holding my fair share of cards. In the past, I had remembered the bad hands and forgotten about the good ones.

That led me to an inescapable conclusion—perhaps my game was not as good as I had thought. So it was back to basics, in particular studying the technique of the play of the cards. After a few skull sessions, I was not really surprised to find that, suddenly, my luck changed and I was becoming a winner. Nowadays, when someone tells me that "X" is an incredibly lucky player, I tend

Peanuts



Andy Capp



Mutt 'n' Jeff



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